



ACADEMY

NEWSLETTER OF THE CALIFORNIA ACADEMY OF SCIENCES

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NATURAL
HISTORY
MUSEUM

BEARS: IMAGINATION AND REALITY

Presented by Bank of the West  May 25 through Sept. 2

From black bear cubs to huge grizzlies, the Academy's new exhibit explores all types of bears. "Bears: Imagination and Reality," presented by Bank of the West, examines the bear's steadfast hold in American culture. This major travelling exhibit is the first to fully explore the mystique of the bear, including its life history and place in art and folklore.

Kids will recognize some of their favorite bears, including the teddy bear and the stars of *Goldilocks and the Three Bears*. Native American fetishes, bear claw necklaces, masks, pottery and tobacco pipes show that the fascination with bears has been around long before the Pilgrims landed on Plymouth Rock.

The exhibit's many displays fill the 6,000-square-foot Wattis Hall, putting the spotlight on the grizzly and black bear. The exhibit features more than 25 lifelike models showing the range of sizes and behaviors of these majestic mammals. One display explains hibernation and replicates a black bear

den with a mother nursing her cubs. Touchable specimens of bear hides, skulls, teeth and paws will allow children and adults alike to feel for themselves what a bear is like, and a computer game puts the visitor in charge of managing a bear habitat.

Part of the goal of this multimedia exhibit is to contrast the treatment of these



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cultural icons in the popular media with the reality of bear biology, in hopes of striking a balance in people's understanding. Video of people who have had real encounters with bears are contrasted with Hollywood's version of menacing, upright grizzlies. An interactive computer game quizzes visitors on the information in the exhibit and surveys their new-

formed thoughts about bears.

Once abundant throughout the nation, there are now an estimated 600 to 800 grizzlies living in only 1 percent of their original habitat. The black bear has fared better, with numbers estimated between 180,000 and 200,000, but hunting and habitat destruction threatens its security.

"Bears: Imagination and Reality" was produced by The Science Museum of Minnesota, and is sponsored by major grants from the National Science Foundation, the Great Bear Foundation of Montana and Norwest Banks, N.A.

Bare Facts About Bears

Polar bears commonly stalk seals for prey and have been known to cover their black noses with their paws to keep the seals from seeing them.

Bears, while they do not technically hibernate, do not eat, drink, urinate or defecate during their long, winter sleep.

Bears, like some humans, snore and even spank their young.

Bears are susceptible to many of the same diseases and pests as humans.



© The Science Museum of Minnesota



SPECIAL BEAR ACTIVITIES

Enjoy these special family activities and programs for "Bears: Imagination and Reality" taking place in the exhibit, unless otherwise specified.

Member's Special Viewing, May 25: Forget Saturday cartoons. Be the first to see the exhibit by bringing the family to an early morning, members-only preview from 8 a.m. to 10 a.m. You'll enjoy a continental breakfast, and our youngest members will receive a small gift. Please enter through the back entrance on Middle Drive and show your membership card at the door.

Opening Weekend, May 25-27: Meet the bear that taught kids the importance of preventing forest fires. Smokey Bear will make scheduled appearances (on Saturday only) at 11 a.m., 1 p.m. and 3 p.m. All opening weekend, youngsters will enjoy a short performance of "Goldilocks and the Three Bears" at noon and 2 p.m. Kids also will enjoy making their very own bear masks from 11 a.m. to 3 p.m. The Academy Store will feature "Stuff Your Own Bear" kits for \$7.95 for you to make on-site (outside the new children's store in Cowell Hall) with the help of volunteers from 11 a.m. to 3 p.m.

Ongoing Programs: Every *Tuesday* at 11 a.m., kids can enjoy a 15-minute bear shadow puppet show and learn all about bear behavior. Every *Wednesday* from 11 a.m. to 1 p.m. education staff will help families learn about bear biology with a portable bear learning center, complete with a touchable bear skull, fur and other bear objects. Every *Thursday* at 11 a.m. enjoy a special, 15-minute costumed performance and reading of "Goldilocks and the Three Bears." Stay afterward to meet the three bears and sit in their chairs. Every *Friday* from 11 a.m. to 1 p.m. families will enjoy either making cut-and-paste bear masks with crayons and yarn, or creating book marks with bear stamps.

Academy Store: After viewing the exhibit, you'll surely want to take your own bear home. Stop by the Store's "Bear Den" in the exhibit and the new children's store in Cowell Hall for a whimsical and realistic-looking collection of bears, such as Winnie the Pooh, Paddington Bear and Steiff stuffed bears — plus bear books, toys, models and T-shirts.

REMEMBER SUMMER HOURS BEGIN MEMORIAL DAY WEEKEND — SATURDAY, MAY 25, THE ACADEMY WILL BE OPEN FROM 9 A.M. TO 6 P.M.

SPECIAL LECTURES



Patagonia! Marine Mammals & Wildlife Mysteries

Patagonia is often thought of as no man's land. The unforgiving, treeless plains and scarcity of wildlife disappointed many naturalists in search of new species. However, they overlooked the seas, which are teeming with sea lions, seals and killer whales. Join Dr. Claudio Campagna, field scientist at the Wildlife Conservation Society (WCS), as he describes Patagonia as a land of legends, filled with vast colonies of marine wildlife.

Campagna's research on southern elephant seals, South American sea lions, orcas, guanacos, marine birds and the endangered right whale has brought to light the magnificent biodiversity of marine wildlife living along Patagonia's 1,200 miles of rugged coastline. His studies range from the behavior of marine mammals to the impact of whale watching and other forms of ecotourism.

Today, Campagna's efforts are focused on creating new marine reserves and on maintaining the integrity of those reserves currently in existence. In addition to his work with the WCS, he also is a research biologist for the National Research Council of Argentina. One of the founders and board members of Fundacion Patagonia Natural, he works with the World Bank, the United Nations and WCS to protect the biological diversity of one of the longest-remaining stretches of relatively pristine coast in the world.

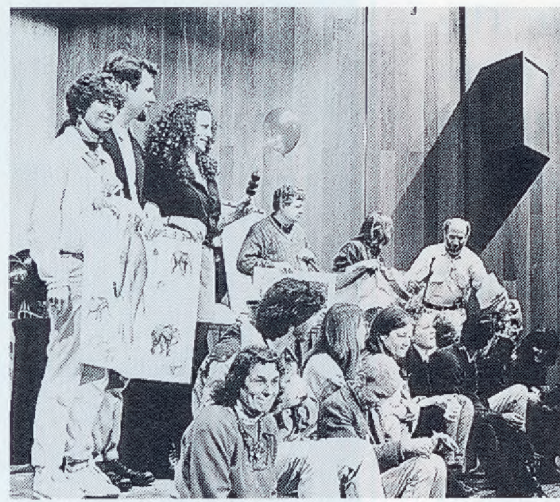
A reception with hors d'oeuvres will proceed the lecture, which is co-sponsored by the Academy of Sciences and WCS.

Thur., May 16

7:30 p.m. lecture — \$6 CAS/WCS members, \$10 nonmembers

6:30 p.m. reception and lecture — \$36 CAS/WCS members, \$45 nonmembers

Special Lectures are presented in the auditorium. Use order form for tickets. For more information, please call 750-7128.



Dr. Art's Environmental Medicine Show

What better way to spend Mother's Day than by also celebrating Mother Earth? Dr. Art Sussman will present just three principles that explain how the Earth operates in "Dr.

Art's Environmental Medicine Show." Sussman, a noted science and environmental educator, combines the excitement of scientific "Mr. Wizard"-type demonstrations with audience participation. He provides a simple, but powerful, framework for investigating all environmental issues. With Dr. Art as your guide, you will explore a systematic approach to matter, energy and life, both globally and locally, in this 45-minute presentation.

*Sun., May 12 — 1 p.m.
(Auditorium)*



Bring Mom to the Academy for Free on Mother's Day

Mom doesn't want fancy gifts, she wants to spend time with you on Mother's Day. Take her to the Academy of Sciences and make her proud by sharing all you know about the natural world! To show its appreciation for all mothers' hard work, the Academy of Sciences will admit mothers free when accompanied by their children on Sunday, **May 12**.

MORRISON



WT Sullivan/Dark-Sky Association

Lighting Myths

Sky watchers, from professional astronomers to casual stargazers, experience a significant amount of light pollution and light trespass. As an amateur astronomer operating two per-

sonal observatories in Arizona, Dr. Tim Hunter is trying to do something to improve star viewing.

Hunter will explain what you can do to help return the Milky Way to our urban skies. He is co-founder and current president of the International Dark-Sky Association, a non-profit corporation dedicated to promoting quality outdoor lighting and combatting the effects of light pollution.

Tue., May 21 — 7:30 p.m.

Tickets, \$3 each

This concludes the Spring 1996 Series. After a recess June-August, the fall '96 series will run Sept. through Nov. For tickets, please use order form on back. Tickets may be available the day of the lecture on a standby basis. Call 750-7127 for more information.

ADULT EDUCATION



Grape Growing and Wine Making

The history of viticulture (grape growing) and enology (wine making) is deeply entwined in the fabric of civilization. Join Greg de Nevers and Brooks Painter for this weekend class that will cover many aspects of the wine industry. We will visit vineyards in Sonoma and Napa counties to observe and discuss grape growing techniques such as grape varietals and planting strategies, as well as phylloxera and other grape pests. We also will visit wineries to explore the fermentation process. Saturday night will be spent at the Academy's nature preserve, Pepperwood, where we will enjoy a comparative tasting of fine wines from this world-famous wine region. Participants need to provide sleeping bag and pad, food and transportation.

June 1-2

Cost: \$125 members/\$140 nonmembers

Our Cousins, The Apes

As humans we are related at some level to all other animals, but we are most closely related to a specific group of higher primates, the apes. Although we tend to separate ourselves from these creatures through many cultural inventions, we share with apes a long evolutionary history and many common features of anatomy, evolutionary history and behavior. Join Academy of Sciences' anthropologist Nina Jablonski for a comprehensive look at the apes, including language acquisition, hunting abilities and tool use. Particular attention will be paid to understanding the qualities of these animals in their evolutionary and environmental contexts, and to the prospects of their conservation.

June 4-18 (3 Thur.) — 7 p.m. to 9 p.m.

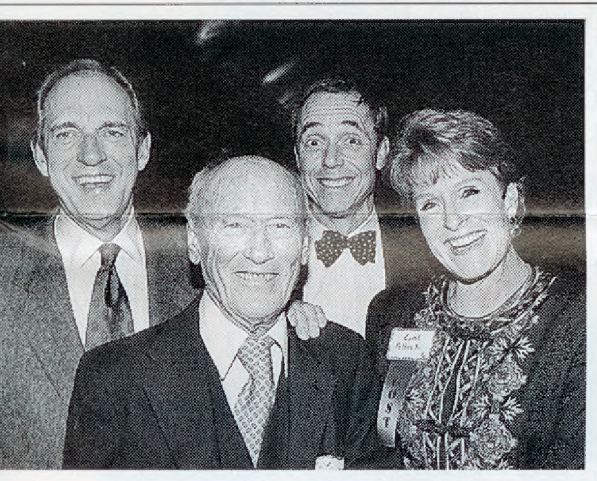
Cost: \$55 members/\$65 nonmembers

To register, please use the form on the back page. For more information, contact adult and family education at 750-7100.

May Sky Shows

Sky Show/ Description	Weekday	Weekend
Journey by Starlight <i>navigating by stars</i> ends June 16	2 p.m.	2 & 4 p.m.
Knock, Knock <i>the search for extraterrestrial life</i> ends June 16	—	1 & 3 p.m.
StarTalk <i>tour of the night sky</i>	—	noon
Where in Space is Carmen Sandiego? <i>a family show</i>	—	11 a.m.

Tickets can be purchased one half hour before the show at the box office once inside the Academy of Sciences (\$2.50 adults/\$1.50 youth, though some shows vary). Members must redeem their passes for tickets at the box office prior to the show. For more information, please call 750-7141.



DONOR APPRECIATION EVENING

Friends of the Academy of Sciences (from left) Henry Timnick and Larry Goldman are greeted by Academy of Sciences President Dr. John McCosker and development officer Carol Polk at the Donor Appreciation Evening on February 9.

This annual event honors the Friends of the Academy of Sciences who donate \$1,000 a year or more to support the Academy. This year 100 Friends gathered to hear how we are putting new technologies to use in research and education.

Special Exploratorium Offer for Academy Members

Exploratorium is extending a special offer to members of the Academy of Sciences. Become a member of the Exploratorium during the month of May and you will receive \$10 off your membership. This offer is limited to new members and cannot be used with other Exploratorium offer. For more information, please call the Exploratorium at (415) 353-0402.



YOUNG AUDIENCES

Theatre Flamenco

Experience the diversity of Spanish Dance with the Bay area's leading Spanish dance company. The whole family will clap along and shout "olay" as high-stepping dancers in colorful costumes, lively music, and castanets sweep you away to sunny Spain, Mexico and the Caribbean.

Sun., May 19 — 1 p.m. (Auditorium)

This 45-minute family series is presented in the auditorium and is funded by San Francisco Grants for the Arts. Free after general admission. For more information, call Young Audiences at (415) 863-1719.

Holiday Cruise: The Natural Treasures of the Yachtsman's Caribbean

This winter voyage aboard the *Nantucket Clipper* will provide a unique perspective of some of the world's most beautiful waters. Your voyage begins on Puerto Rico's seldom-visited East Coast with a visit to El Yunque Rain Forest, home to the endangered Puerto Rican parrot and 240 tree species. Also on the itinerary are the islands of Culebra, Tortola, Norman Island, Virgin Gorda, Jost Van Dyke, St. John and St. Thomas. There will be ample opportunities to hike on island trails, swim off the ship, snorkel in the crystal clear water and visit beautiful and unspoiled beaches in the ship's fleet of zodiacs.

Dec. 23-30
Cost: \$1,770-\$2,670 per person (double occupancy) including air

Don't miss out on these two adventures: Papua New Guinea: A Cultural and Wildlife Expedition on Oct. 16 to Nov. 4, with Terry Gosliner/\$6,995 (note change in price from April newsletter); and Burma: The Road to Mandalay on Nov. 2-15, with Nina Jablonski/starts at \$3,775.

For more information on this and other Academy staff-led tours, please call 750-7348.

TRADITIONAL ARTS

Pre-Hispanic Music From Meso-America

Michael Quijas and the ensemble *Ebecatl* perform Meso-American music on pre-Hispanic instruments such as the clay flute, turtle shell, slit drum and a stringed instrument called a *chapareke*.

Sat., May 4 — 1 p.m. to 2 p.m. (Auditorium)

The History of Pysanky

More than 2,000 years ago, the art of decorating eggs (*pysanky*) was a celebratory custom associated with the coming of spring. Madame Zoya Hatton will demonstrate his beautiful art form and discuss the historical development of egg decorating in Russia and the Ukraine.



Sat., May 11 — 1 p.m. to 2 p.m. (Auditorium)

Irish Folk Music

The recently formed band of Irish immigrants named *Shanachie*, meaning "old story teller" in Gaelic, play traditional and contemporary tunes on the mandolin, *bodhran* (drum), banjo, guitar, *bazouki* (similar to a mandolin) and fiddle.

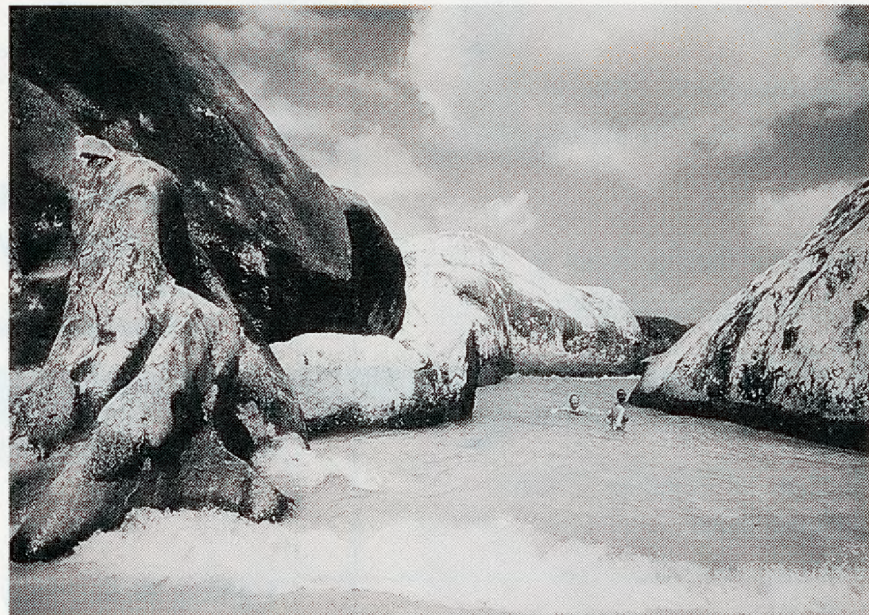
Sat., May 18 — 1 p.m. to 2 p.m. (Auditorium)

Armenian Textiles

In celebration of Armenian Independence Day on May 28 Vergine Der Torossian displays carpets and needlework, and discusses her technique of transferring traditional motifs from Armenian rugs to her own embroidery creations.

Sat., May 25 — 1 p.m. to 2 p.m. (Auditorium)

Explore cultural traditions from around the world. Free after general admission. Call 750-7164 for more information.



SUN.	MON.	TUE.	WED.	THU.	FRI.	SAT.
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

- 4

Saturday

Pre-Hispanic Music From Meso-America, 1 p.m. (Traditional Arts)
- 5

Sunday

"Creatures of the Ice Ages & Other Amazing Mammals" exhibit closes
- 11

Saturday

The History of Pysanky, 1 p.m. (Traditional Arts)
- 12

Sunday

Dr. Art's Environmental Medicine Show, noon (Family Activity)

Mother's Day free admission for moms
- 16

Thursday

Patagonia! Marine Mammals & Wildlife Mysteries, 7:30 p.m. (Special Lecture)
- 18

Saturday

Irish Folk Music, 1 p.m. (Traditional Arts)
- 19

Sunday

Theatre Flamenco, 1 p.m. (Young Audiences)
- 21

Tuesday

Lighting Myths, 7:30 p.m. (Astronomy Lecture)
- 25

Saturday

Summer hours begin, 9 a.m. until 6 p.m.

"Bears: Imagination and Reality" exhibit opens/special festivities

Members' bears exhibit preview, 8 a.m. (Membership)

Armenian Textiles, 1 p.m. (Traditional Arts)
- 27

Monday

"Song of the Ancient Ocean: Maui's Turning Back the Sky" exhibit closes

FUTURE DATES TO REMEMBER

June 2, "Lu Huan: Stone Carvings by a Chinese Master" exhibit closes; **June 12**, San Francisco Zoomobile Program with Joe Fitting (Members Meeting); **June 16**, "Journey by Starlight" sky show closes; **June 16**, "Knock, Knock" sky show closes; **July 10**, Patagonia with Gary Williams (Members Meeting).

VISITOR INFORMATION

Special Exhibits: "Creatures of the Ice Age & Other Amazing Mammals," through May 5; "Song of the Ancient Ocean: Maui's Turning Back the Sky," through May 27; "Lu Huan: Stone Carvings by a Chinese Master," through June 2; "Around the World in Eighty Years," through Sept. 2; "Bears: Imagination and Reality," May 25 through Sept. 2 • **Feeding Times:** Fish Roundabout, 2 p.m.; Penguins, 11:30 a.m., & 4 p.m. • **Science In Action:** General weekday programs, 11:30 a.m. Children's weekend programs, 1 p.m., & 3:30 p.m. • **Guided Tours:** Free one-hour highlight tours daily. • **Laserium Shows:** Thu.-Sun. evenings. • **Free Day:** First Wed. of each month. • **Hours:** Open every day of the year. Winter hours 10 a.m.-5 p.m. Summer hours (Memorial Day weekend to Labor Day) 9 a.m.-6 p.m.

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ACADEMY OF SCIENCES WINS FEDERAL SUPPORT TO TRAIN UNDERGRADUATES

The National Science Foundation awarded the Academy of Sciences \$142,350 over the next three years to hold a Summer Systematics Institute (SSI), an internship program that pairs biology majors from U.S. universities with Academy of Sciences' researchers.

"This was the best experience of my undergraduate education," said a 1995 intern. SSI participants learn about systematic biology — the study of the diversity of living things, their relationships to each other and their taxonomic classification — and ways this research applies to modern problems, including species loss and changes in species diversity.

SSI was launched in 1995, says Academy of Sciences Research Di-

vision Director Patrick Kociolek "to extend research experiences to undergraduate students. SSI responds to a national need for systematic biology training resources."

Interns work closely with researchers to understand the organisms under investigation and the processes of research. With access to the museum's wide range of resources, including 15 million specimens in our scientific collections, interns compile data and prepare for oral and written presentations. Last year, four scientific publications resulted from SSI research projects.

Use order form for more information.



Dong Lin

1995 SSI intern Rebecca Johnson used the Academy of Sciences' scanning electron microscope to study echinoderms with Dr. Terry Gosliner.

Real Estate: A Creative Contribution

A gift of real estate can be a creative and practical way to contribute significantly to the Academy of Sciences. Gifts may be made in a number of ways, depending upon the type of property and your financial plans.

"Real estate is the most commonly owned asset, and particularly in the Bay area, people may feel locked into their property because of the high capital gains tax they would pay to sell it," said Pam Cook, director of development. "A gift of real estate can take many forms and have wonderful benefits for the donor and, of course, for the Academy of Sciences."

Outright gifts offer double advantages because you may avoid capital gains and estate taxes, and receive an immediate income tax deduction for the property's value. Real estate can be donated in wills or it may be used to create income for your lifetime, with a future gift to the Academy of Sciences. Donors also can contribute gifts which enable them to live in their homes, while receiving an immediate income tax deduction for the future gift.

If you would like information about donating real estate to the Academy of Sciences, please contact the development office at (415) 750-7216 or return the order form above.



See Maui Before It's Gone

Remember to visit the exhibit, "Song of the Ancient Ocean: Maui's Turning Back the Sky," before it closes May 27. This multimedia exhibit is a composition of the artwork of 19 Hawaiian artists communicating their history through conceptual, metaphorical and allegorical designs. The exhibit is presented by *Hale Nauâ III*, a nonprofit organization consisting of indigenous artists genealogically linked to shamen that are dedicated to preserving the culture of Hawaii.

WHO TO CALL ☎ Academy Info., 750-7145 • Academy Store, 750-7410 • Admissions, 750-7159 • Aquarium, 750-7247 • Biodiversity Center, 750-7361 • Development Office, 750-7216 • Docent Tours, 750-7155 • Education Office, 750-7100 • Group Information, 750-7159 • Job Hotline, 750-7333 • Laserium, 750-7138 • Lectures, 750-7128 • Library, 750-7102 • Membership Office, 750-7111 • Planetarium, 750-7141 • Planned Giving, 750-7216 • Receptionist, 221-5100 • Security, 750-7000 • Travel, 750-7348 • Volunteer Services, 750-7154 • Weekend Information, 750-7375

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DEDICATED TO SCIENTIFIC RESEARCH & EDUCATION, INSPIRING RESPECT FOR THE NATURAL WORLD